

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of: U.S. Patent No. 6,320,932

Serial No.: 09/748,590
Filed: December 22, 2000
Issued: November 20, 2001

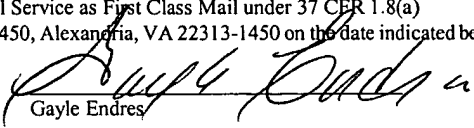
Inventor: Mark Dinsmore

Title: **MINIATURE RADIATION SOURCE WITH FLEXIBLE
PROBE AND LASER DRIVEN THERMIONIC EMITTER**

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop REISSUE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: 11/20/03


Gayle Endres

Mail Stop **REISSUE**
Assistant Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

**COMBINED DECLARATION AND POWER OF ATTORNEY
IN REISSUE APPLICATION**

Sir:

I, Mark Dinsmore, declare that:

1. My residence address is 85 Horse Pond Road, Sudbury, MA.
2. I am a citizen of the United States of America.
3. I believe I am the original, first and sole inventor of the subject matter that is

described and claimed in United States Patent Number 6,320,932B2 (hereinafter "the '932 patent"), granted on November 20, 2001, and for which I solicit a reissue patent.

4. I have read and understand the contents of the attached reissue application, including the specification and claims.

5. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

6. I believe the '932 patent, which matured from application Serial No. 09/748,590, filed on December 22, 2000, and which is a division of application No. 09/311,792, filed on May 13, 1999, now Pat. No. 6,195,411, to be wholly or partly inoperative or invalid by reason of my claiming less than I had a right to claim in the patent. The error includes not having claimed a flexible probe having an x-ray tube at its distal end, and including: a) a flexible optical fiber adapted for transmitting optical radiation incident on a proximal end to a distal end; b) an optical source for generating optical radiation directed to the proximal end of the optical fiber; and c) an x-ray tube coupled to the distal end of the optical fiber, including a thermionic cathode, responsive to optical radiation transmitted to the distal end of said optical fiber and incident upon a surface of the cathode to generate electrons, and an x-ray target responsive to incident electrons emitted from the thermionic cathode to emit x-rays; and d) means for accelerating electrons emitted from the thermionic cathode toward the x-ray target; wherein the beam of transmitted optical radiation has a power level sufficient to heat at least a portion of the surface to an electron emitting temperature so as to cause thermionic emission of electrons from the surface. It was also error not to have claimed a vascular probe, a brachytherapy treatment apparatus, and an x-ray treatment apparatus having these characteristics.

7. All errors being corrected in the reissue application, up to the time of filing this declaration, arose without any deceptive intent.

8. I appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Mark G. Lappin, Registration No. 26,618

Toby H. Kusmer, Registration No. 26,418

Elizabeth E. Kim, Registration No. 43,334

David M. Mello, Registration No. 43,799

Jeffrey J. Miller, Registration No. 39,773

Brian Colandreo, Registration No. 42,427

SEND CORRESPONDENCE TO:

DIRECT TELEPHONE CALLS TO:

Mark G. Lappin
McDermott, Will & Emery
28 State Street
Boston, MA 02109

Mark G. Lappin (617-535-4043)

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of: U.S. Patent No. 6,320,932

Serial No.: 09/748,590

Filed: December 22, 2000

Issued: November 20, 2001

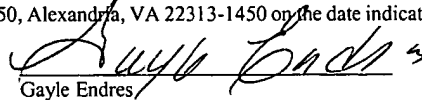
Inventor: Mark Dinsmore

Title: **MINIATURE RADIATION SOURCE WITH FLEXIBLE
PROBE AND LASER DRIVEN THERMIONIC EMITTER**

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop REISSUE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: 11/20/03


Gayle Endres

Mail Stop REISSUE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ASSENT OF ASSIGNEE TO REISSUE

Sir:

The undersigned **Carl-Zeiss-Stiftung**, doing business as **Carl Zeiss**, a legal person of Germany, with a post address **Carl Zeiss Strass 22, 73447 Oberkochen, Germany**, assignee of the entire interest in the above-mentioned Letters Patent, hereby assents to the accompanying reissue patent application. Attached is a "Statement Under 37 CFR 3.73(b)," establishing the right of the assignee, **Carl-Zeiss-Stiftung**, doing business as **Carl Zeiss**, to take action in this reissue application. The undersigned is empowered to sign this certificate on behalf of the assignee.

Respectfully submitted,

**CARL-ZEISS-STIFTUNG,
doing business as CARL ZEISS**

Date: _____

By: _____

Printed Name: _____

Title: _____

Statement Under 37 CFR 3.73(b)

Applicant/Patent Owner: Mark Dinsmore / Carl Zeiss

Application No./Patent No.: 09/748,590/6,320,932 Filed/Issue Date: 12/22/00/11/20/01

Entitled: MINIATURE RADIATION SOURCE WITH FLEXIBLE PROBE AND LASER
DRIVEN THERMIONIC EMITTER

Carl-Zeiss-Stiftung, doing business as Carl Zeiss, a legal person of Germany

(Name of Assignee)

(Type of Assignee)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: _____ To: _____

The document was recorded in the Patent and Trademark Office at

Reel _____ Frame _____, or for which thereof is attached.

2. From: _____ To: _____

The document was recorded in the Patent and Trademark Office at

Reel _____ Frame _____, or for which thereof attached.

3. From: _____ To: _____

The document was recorded in the Patent and Trademark Office at

Reel _____ Frame _____, or for which thereof is attached.

☐ Additional documents in the chain of title are listed on at.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: _____

Name: _____

Title: _____

Telephone Number: _____

Signature: _____